

RECEIVED

SEP 10 2003

DAC  
B

OFFICE OF PETITIONS



<b>TRANSMITTAL FORM</b> (to be used for all correspondence after initial filing)		Application Number	09/578,895
		Filing Date	May 26, 2000
		First Named Inventor	Shunpei YAMAZAKI et al.
		Group Art Unit	2811
		Examiner Name	Gene M. Munson
Total Number of Pages in This Submission		Attorney Docket Number	740756-2160

ENCLOSURES (check all that apply)		
<input checked="" type="checkbox"/> Fee Transmittal Form <input checked="" type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment / Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Assignment Papers (for an Application) <input type="checkbox"/> Drawing(s) <input type="checkbox"/> Declaration and Power of Attorney <input type="checkbox"/> Licensing-related Papers <input checked="" type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____	<input type="checkbox"/> After Allowance Communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input type="checkbox"/> Application Data Sheet <input type="checkbox"/> Request for Corrected Filing Receipt with Enclosures <input type="checkbox"/> A self-addressed prepaid postcard for acknowledging receipt <input type="checkbox"/> Other Enclosure(s) (please identify below):
Remarks	<input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge any additional fees required or credit any overpayments to Deposit Account No. 19-2380 (740756-2160) for the above identified docket number.	

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT	
Firm or Individual name	Jeffrey L. Costellia, Reg. No. 35,483 Nixon Peabody LLP 401 9 <sup>th</sup> Street, N.W. Suite 900 Washington, D.C. 20004-2128
Signature	
Date	September 5, 2003

CERTIFICATE OF MAILING OR TRANSMISSION [37 CFR 1.8(a)]	
I hereby certify that this correspondence is being:	
<input type="checkbox"/> deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Mail Stop _____, Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450	
<input type="checkbox"/> transmitted by facsimile on the date shown below to the United States Patent and Trademark Office at (703) _____.	
Date	Signature
	Typed or printed name

# FEE TRANSMITTAL FOR FY 2002

Patent fees are subject to annual revision.

TOTAL AMOUNT OF PAYMENT \$1,550.00

Complete if Known

Application Number 09/578,895  
Filing Date May 26, 2000  
First Named Inventor Shunpei YAMAZAKI et al.  
Examiner Name G. Munson  
Group Art Unit 2811  
Attorney Docket No. 740756-2160

## METHOD OF PAYMENT

1. ☒ The Commissioner is hereby authorized to charge indicated fees and credit any overpayments to:

Deposit Account Number 19-2380 (740756-2160)

Deposit Account Name Nixon Peabody LLP

- ☒ Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17

☐ Applicant claims small entity status. See 37 CFR 1.27

2. ☒ Payment Enclosed:

☒ Check ☐ Credit Card ☐ Money Order ☐ Other

## FEE CALCULATION

### 1. BASIC FILING FEE

Large Entity Fee Code	Large Entity Fee (\$)	Small Entity Fee Code	Small Entity Fee (\$)	Fee Description	Fee Paid
101	740	201	370	Utility filing fee	
106	330	206	165	Design filing fee	
107	510	207	255	Plant filing fee	
108	740	208	370	Reissue filing fee	
114	160	214	80	Provisional filing fee	

SUBTOTAL (1) \$

### 2. EXTRA CLAIM FEES

Total Claims  -20\*\* =  X  =

Independent Claims  -3\*\* =  X  =

Multiple Dependent  =

Large Entity Fee Code	Large Entity Fee (\$)	Small Entity Fee Code	Small Entity Fee (\$)	Fee Description	Fee Paid
103	18	203	9	Claims in excess of 20	
102	84	202	42	Independent claims in excess of 3	
104	280	204	140	Multiple dependent claim, if not paid	
109	84	209	42	** Reissue independent claims over original patent	
110	18	210	9	** Reissue claims in excess of 20 and over original patent	

SUBTOTAL (2) \$

\*\*or number previously paid, if greater; For Reissues, see above

## FEE CALCULATION (continued)

### 3. ADDITIONAL FEES

Large Entity Fee Code	Large Entity Fee (\$)	Small Entity Fee Code	Small Entity Fee (\$)	Fee Description	Fee Paid
105	130	205	65	Surcharge - late filing fee or oath	
127	50	227	25	Surcharge - late provisional filing fee or cover sheet	
139	130	139	130	Non-English transaction	
147	2,520	147	2,520	For filing a request for <i>ex parte</i> reexamination	
112	920*	112	920*	Requesting publication of SIR prior to Examiner action	
113	1,840*	113	1,840*	Requesting publication of SIR after Examiner action	
115	110	215	55	Extension for reply within first month	
116	400	200	200	Extension for reply for the second and third months	\$810.00
117	920	460	460	Extension for reply within third month	
118	1,440	720	720	Extension for reply within fourth month	
128	1,960	228	980	Extension for reply within fifth month	
119	320	219	160	Notice of Appeal	
120	320	220	160	Filing a brief in support of an appeal	
121	280	221	140	Request for oral hearing	
138	1,510	138	1,510	Petition to institute a public use proceeding	
140	110	240	55	Petition to revive - unavoidable	
141	1,280	241	640	Petition to revive - unintentional	
142	1,280	242	640	Utility issue fee (or reissue)	
143	460	243	230	Design issue fee	
144	620	244	310	Plant issue fee	
122	130	122	130	Petitions to the Commissioner	
123	50	123	50	Processing fee under 37 CR 1.17(q)	
126	180	126	180	Submission of Information Disclosure Stmt	
581	40	581	40	Recording each patent assignment per property (times number of properties)	
146	740	246	370	Filing a submission after final rejection (37 CFR § 1.129(a))	
149	740	249	370	For each additional invention to be examined (37 CFR § 1.29(b))	
179	740	279	370	Request for Continued Examination (RCE)	\$740.00
169	900	169	900	Request for expedited examination of a design application	

Other fee (specify) \_\_\_\_\_

\* Reduced by Basic Filing Fee Paid

SUBTOTAL (3) \$1,550.00

## SUBMITTED BY

Name (Print/Type) Donald R. Studebaker

Signature

Registration No. (Attorney/Agent)

32,815

Complete (if applicable)

Telephone (703) 770-9300

Date July 29, 2002

# FEE TRANSMITTAL FOR FY 2003

Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$130.00)

Complete if Known

Application Number 09/578,895  
Filing Date May 26, 2000  
First Named Inventor Shunpei YAMAZAKI et al.  
Examiner Name Gene M. Munson  
Art Unit 2811  
Attorney Docket No. 740756-2160

RECEIVED

## METHOD OF PAYMENT (check all that apply)

☒ Check ☐ Credit Card ☐ Money Order ☐ Other ☐ None

☒ Deposit Account:

Deposit Account Number 19-2380 (740756-2160)

Deposit Account Name Nixon Peabody LLP

The Commissioner is authorized to: (check all that apply)

☐ Charge fee(s) indicated below ☒ Credit any overpayments

☒ Charge any additional fee(s)

☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

## FEE CALCULATION

### 1. BASIC FILING FEE

Large Entity Fee Code	Large Entity Fee (\$)	Small Entity Fee Code	Small Entity Fee (\$)	Fee Description	Fee Paid
1001	750	2001	375	Utility filing fee	
1002	330	2002	165	Design filing fee	
1003	520	2003	260	Plant filing fee	
1004	750	2004	375	Reissue filing fee	
1005	160	2005	80	Provisional filing fee	

SUBTOTAL (1) (\$ 0)

### 2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

Total Claims	Extra Claims	Fee from below	Fee Paid
-20** =	X		0
Independent Claims	-3** =	X	0
Multiple Dependent	X		0

Large Entity Fee Code	Large Entity Fee (\$)	Small Entity Fee Code	Small Entity Fee (\$)	Fee Description
1202	18	2202	9	Claims in excess of 20
1201	84	2201	42	Independent claims in excess of 3
1203	280	2203	140	Multiple dependent claim, if not paid
1204	84	2204	42	** Reissue independent claims over original patent
1205	18	2205	9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$ 0)

\*\*or number previously paid, if greater; For Reissues, see above

## FEE CALCULATION (continued)

### 3. ADDITIONAL FEES

Large Entity Fee Code	Large Entity Fee (\$)	Small Entity Fee Code	Small Entity Fee (\$)	Fee Description
1051	130	2051	65	Surcharge - late filing fee or oath
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet
1053	130	2053	130	Non-English specification
1812	2,520	2182	2,520	For filing a request for <i>ex parte</i> reexamination
1804	920*	2184	920*	Requesting publication of SIR prior to Examiner action
1805	1,840*	2185	1,840*	Requesting publication of SIR after Examiner action
1251	110	2251	55	Extension for reply within first month
1252	410	2252	205	Extension for reply within second month
1253	930	2253	465	Extension for reply within third month
1254	1,450	2254	725	Extension for reply within fourth month
1255	1,970	2255	985	Extension for reply within fifth month
1401	320	2401	160	Notice of Appeal
1402	320	2402	160	Filing a brief in support of an appeal
1403	280	2403	140	Request for oral hearing
1451	1,510	2451	1,510	Petition to institute a public use proceeding
1452	110	2452	55	Petition to revive - unavoidable
1453	1,300	2453	650	Petition to revive - unintentional
1501	1,300	2501	650	Utility issue fee (or reissue)
1502	470	2502	235	Design issue fee
1503	630	2503	315	Plant issue fee
1460	130	2460	130	Petitions to the Commissioner
1807	50	2187	50	Processing fee under 37 CFR 1.17(q)
1806	180	2186	180	Submission of Information Disclosure Stmt
8021	40	2021	40	Recording each patent assignment per property (times number of properties)
1809	750	2809	375	Filing a submission after final rejection (37 CFR 1.129(a))
1810	750	2810	375	For each additional invention to be examined (37 CFR 1.129(b))
1801	750	2801	375	Request for Continued Examination (RCE)
1802	900	2182	900	Request for expedited examination of a design application

Other fee (specify) \_\_\_\_\_

\*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$130.00)

## CERTIFICATE OF MAILING OR TRANSMISSION [37 CFR 1.8(a)]

I hereby certify that this correspondence is being:

- ☐ deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Mail Stop \_\_\_\_\_, Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450
- ☐ transmitted by facsimile on the date shown below to the United States Patent and Trademark Office at (703) \_\_\_\_\_

Date

Signature

Typed or printed name

## SUBMITTED BY

Name (Print/Type) Jeffrey L. Costellia

Signature

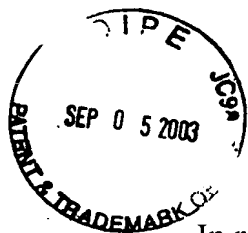
Registration No. 35,483  
(Attorney/Agent)

Complete (if applicable)

Telephone (202) 585-8000

Date September 5, 2003

SEND TO: Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450



PATENT  
740756-2160

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE **RECEIVED**

SEP 10 2003

OFFICE OF PETITIONS

In re Patent Application of: )  
Shunpei YAMAZAKI et al. ) Group Art Unit: 2811  
Serial No. 09/578,895 ) Examiner: Gene M. Munson  
Filed: May 26, 2000 )  
For: ELECTRO-OPTICAL DEVICE AND ) Date: September 5, 2003  
ELECTRONIC DEVICE )

**PETITION, UNDER 37 C.F.R. 1.182, REQUESTING  
THE COMMISSIONER INVOKE SUPERVISORY AUTHORITY AND  
DIRECT THE EXAMINER TO CONSIDER THE INFORMATION  
DISCLOSURE STATEMENT FILED NOVEMBER 21, 2001 PURSUANT TO  
37 C.F.R. 1.97 AND MPEP CHAPTER 609**

**MAIL STOP PETITION**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

The Petitioners request the Commissioner invoke supervisory authority to instruct Examiner Munson to fully consider each reference cited in the Information Disclosure Statement (IDS) filed November 30, 2001 (copy attached). Specifically, the petitioners request that the Examiner be instructed to consider each of the related U.S. Application Nos. 09/432,662 ('662), 09/580,485 ('485), 09/587,369 ('369), cited in the IDS of November 30, 2001, since that IDS filing was in complete compliance with the requirements of 37 C.F.R. 1.97 and 1.98.

The relevant facts concerning this request are as follows:

1. The instant application was filed on May 26, 2000.
2. A first Office Action was issued by Examiner Munson on July 30, 2001.

3. An Amendment and Information Disclosure Statement (IDS) were filed in response to the first Office Action on November 21, 2001 and November 30, 2001, respectively. The IDS included a PTO-1449 form listing the '662, '485 and '369 related applications and provided copies of the specification/drawings from each application.

4. A second final Office Action was issued by Examiner Munson on January 29, 2002 (copy attached) which included a copy of the PTO-1449 with the '662, '485 and '369 related application listings struck through and the notation "No copies nor indication that there are allowed pertinent claims to this invention" on the PTO-1449 form.

5. On February 27, 2002, the Applicants filed a Request For Acknowledgment Of Information Disclosure Statement which included a copy of the IDS and USPTO date stamped postcard for the IDS of November 30, 2001 and new copies of the '662, '485 and '369 related applications, as well as a further request to consider the related applications.

6. On June 6, 2002, the Applicants filed an Amendment which included, at page 4, another request to consider the '662, '485 and '369 related applications of the IDS of November 30, 2001 and outlined the reasons why the IDS must be considered by the Examiner, i.e., the IDS of November 30, 2001 was completely compliant with 37 C.F.R. §1.97-1.98.

7. On July 16, 2002, the Examiner issued an Advisory Action which included the notation at Box 11. "Contrary to response (p.4), there is nothing to consider for the patent applications, absent indication that there are allowed claims pertinent to this invention. No copy of indentified [sic] pending allowed claims has been provided, 37 C.F.R. 1.98. SN 09/432,662 will be considered if patent issues."

8. On July 29, 2002, the Applicants filed an RCE and a Preliminary Amendment (copy Attached) which included, at page 4, a renewed request for consideration of the '662, '485 and '369 related applications of the IDS of November 30, 2001 while pointing out the neither 37 C.F.R. 1.97 nor 1.98 contain any stipulation

that related U.S. patent applications must contain claims indicated as allowed, nor that copies of the allowed claims be provided before an Examiner will consider them.

9. On September 3, 2002, the Examiner issued an Office Action which included, at the paragraph bridging pages 3-4, the statement as follows:

“With regard to the remarks which accompany the preliminary amendment, filed 29 July 2002, no copy of pending claims for pending applications SN 09/432,662 has been provided. 37 C.F.R. 1.98. If provided, only allowed claims relevant to an existing claim in this application would be considered. ‘There is no duty to submit information which is not material to the patentability of any existing claim.’ 37 C.F.R. 1.56. Absent allowed claims in SN 09/432,662, there appears nothing to consider in SN 09/432,662 material to the patentability of any existing claim in this application. However, SN 09/432,662 will be considered if a patent issues.” (Emphasis added)

10. On April 24 and 28, 2003, Mr. Massie of our office contacted Supervisory Patent Examiner (SPE) Mr. Thomas of TC Art Unit 2811 regarding a particular reason why the Examiner has not considered the ‘662, ‘485 and ‘369 related applications of the IDS of November 30, 2001 or provided an indication of such consideration by providing an initialed copy of the PTO-1449 form provided by the Applicants. After reviewing the file, SPE Thomas informed Mr. Massie that while he is sympathetic to the Applicants’ request to consider the November 30<sup>th</sup> IDS, since Mr. Munson is a Primary Examiner he has little authority or influence in making the Examiner consider the ‘662, ‘485 and ‘369 related applications of the November 30<sup>th</sup> IDS. When asked if a Petition under 37 C.F.R. 1.181 would be an appropriate means to provide SPE Thomas with the authority to instruct the Examiner to consider the IDS, SPE Thomas informed Mr. Massie, that if filed, and placed before him for his decision he would **not grant such a petition**, but did not provide any further details as to the reason for such a denial except to say for the reasons of record advanced by Examiner Munson.

11. On May 2, 2003, the Applicants filed an RCE and Preliminary Amendment (copy attached) which included, at page 3, line 17, to page 4, line 6, a specific request “Should the Examiner maintain his position in this regard, he is again hereby

requested to provide support for such position by pointing out the specific text of 37 C.F.R. 1.98 requiring an indication that there are allowed claim pertinent to this invention set forth in the related applications.”

12. On June 3, 2003, the Examiner issued a Notice of Allowability (PTOL-37 form) which included, at Box “Examiner’s ~~Amendment~~/Comment - Re remarks (p 4-5) about IDS, see Office Action, dated 3 Sept. 2002, paper No. 17, pages 3-4, 37 CFR 1.56, 1.98.”

13. On July 23, 2003, Mr. Massie of our office spoke on the telephone and then met briefly with Technology Director Arthur Grimley to outline Examiner Munson’s refusal to consider what had been a proper and timely filed IDS on November 30, 2001. While Director Grimley had not had an opportunity to review the instant application file or to speak with the Examiner Munson and SPE Thomas, he understood the Applicants distress regarding having the IDS considered and was aware that Examiner Munson has been adamant in these situations. When the possibility of filing a petition in this matter, under 37 C.F.R. 1.182, was raised, Director Grimley acknowledged that such an alternative would appear to be appropriate in this instance.

14. On August 8, 2003, the Notice of Allowability was mailed in Application S.N. 09/580,485 (a copy of the allowed claims is attached)

15. On September 9, 2003, the Application S. N. 09/432,662 will issue as U.S. Patent No. 6,617,644 (a copy of the allowed claims is attached)

### **Petitioners' Request**

Since the Issue Fee is due for the instant application on September 3, 2003, it is imperative that the Petitioners receive consideration of this petition promptly in order to avoid the time and expense of having to file a Request to Withdraw from Issue under 37 C.F.R. 313 and RCE/CPA in order to avoid the patent from issuing without the '662, '485 and '369 related applications being considered and printed on the published patent. Further, the Petitioners respectfully request that the instant petition be granted and that the Examiner be instructed to consider the '662, '485 and '369 related applications filed with in the IDS of November 30, 2001. It is also requested that the Examiner be instructed to provide an indication of such consideration of the '662, '485 and '369 related applications by providing a completed References Cited (PTO-1449) form attached hereto along with a (Supplemental) Notice of Allowability (PTO-37) form as soon as possible in order that the patent can be issued with the listing of the '662, '485 and '369 related applications.

### **Petitioners' Arguments**

The Petitioners assert that throughout the prosecution of the present application Examiner Munson has failed to follow the requirements of MPEP Chapter 609 or understand the responsibilities of the Examiner under 37 C.F.R. 1.97.-1.98 or understand the responsibilities of the Petitioners and their representatives under 37 C.F.R. 1.56 which has resulted in the Examiner's improper decision to refuse consideration of the '662, '485 and '369 related applications.

Specifically, 37 C.F.R. 1.56 states:

A patent by its very nature is affected with a public interest. The public interest is best served, and the most effective patent examination occurs when, at the time an application is being examined, the Office is aware of and evaluates the teachings of all information material to patentability. Each individual associated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the Office, which includes a duty to disclose to the Office all information known to that individual to be material to patentability as defined in this section. The duty to disclose information exists with respect to each pending claim until the claim is



cancelled or withdrawn from consideration, or the application becomes abandoned. Information material to the patentability of a claim that is cancelled or withdrawn from consideration need not be submitted if the information is not material to the patentability of any claim remaining under consideration in the application. There is no duty to submit information which is not material to the patentability of any existing claim. The duty to disclose all information known to be material to patentability is deemed to be satisfied if all information known to be material to patentability of any claim issued in a patent was cited by the Office or submitted to the Office in the manner prescribed by §§ 1.97(b)-(d) and 1.98...

Under this section, information is material to patentability when it is not cumulative to information already of record or being made of record in the application, and

(1) It establishes, by itself or in combination with other information, a *prima facie* case of unpatentability of a claim; or

(2) It refutes, or is inconsistent with, a position the applicant takes in:

- (i) Opposing an argument of unpatentability relied on by the Office, or
- (ii) Asserting an argument of patentability. (Emphasis added)

Therefore, § 1.56 places upon the Applicants and their representatives the responsibility of providing to the USPTO all information material to the patentability of at least one pending claim and that such material must be submitted during the examination period according the requirements of § 1.97 and § 1.98. According to § 1.56, it is the Applicants and their representatives who must determine the materiality under § 1.56 of any information and the Applicants or their representatives who must submit the material information, if known, to the USPTO for consideration.

The Applicants determined that submitted the originally filed '662, '485 and '369 related applications are material to the patentability of at least one claim of the instant application and as a result filed the Information Disclosure Statement of November 30, 2001 containing the '662, '485 and '369 related applications. The current version of 37 C.F.R. 1.97 requires:

(a) In order for an applicant for a patent or for a reissue of a patent to have an information disclosure statement in compliance with § 1.98 considered by the Office during the pendency of the application, the information disclosure statement must satisfy one of paragraphs (b), (c), or (d) of this section...

(c) An information disclosure statement shall be considered by the Office if filed after the period specified in paragraph (b) of this section, provided that

the information disclosure statement is filed before the mailing date of any of a final action under § 1.113, a notice of allowance under § 1.311, or an action that otherwise closes prosecution in the application, and it is accompanied by one of:

- (1) The statement specified in paragraph (e) of this section; or
- (2) The fee set forth in § 1.17(p).

Therefore, since the November 30<sup>th</sup> IDS was filed before the final Office Action of January 29, 2002, the fee under § 1.17(p) was included. Additionally, § 1.98 requires that each IDS submitted include:

(a) Any information disclosure statement filed under § 1.97 shall include:

(1) A list of all patents, publications, applications, or other information submitted for consideration by the Office;

(2) A legible copy of:...

(iii) For each cited pending U.S. application, the application specification including the claims, and any drawing of the application, or that portion of the application which caused it to be listed including any claims directed to that portion; and...

(3) Each U.S. application listed in an information disclosure statement must be identified by the inventor, application number, and filing date... (Emphasis added).

A further review of the November 30<sup>th</sup> IDS reveals that a legible copy of each of the originally filed '662, '485 and '369 related applications was included (each of which included the description, claims, abstract and drawings) and that the IDS listed each application by application number, filing date and inventor.

From the above facts it is clear that the Applicants fully complied with the requirements of § 1.56, § 1.97 and § 1.98 with regard to the '662, '485 and '369 related applications of the November 30<sup>th</sup> IDS.

MPEP Chapter 609 outlines the requirements of § 1.56, § 1.97 and § 1.98 and sets forth the responsibilities of the USPTO once a proper IDS submission is made by stating:

...An information disclosure statement filed in accordance with the provisions of 37 CFR 1.97 and 37 CFR 1.98 will be considered by the examiner assigned to the application. The requirements for the content of a statement have been simplified in the rules, to encourage individuals

associated in a substantive way with the filing and prosecution of a patent application to submit information to the Office so the examiner can evaluate its relevance to the claimed invention. The procedures for submitting an information disclosure statement under the rules are designed to encourage individuals to submit information to the Office promptly and in a uniform manner. These rules provide certainty for the public by defining the requirements for submitting information disclosure statements to the Office so that the Office will consider information contained therein before a patent is granted... (Emphasis added)

Further, MPEP Chapter 609 (III)(A) sets for the minimum requirements for an information disclosure statement by stating:

...Each information disclosure statement must include a list of all patents, publications, U.S. applications, or other information submitted for consideration by the Office.

37 CFR 1.98(b) requires that each item of information in an IDS be identified properly. U.S. patents must be identified by the inventor, patent number, and issue date. U.S. patent application publications must be identified by the applicant, patent application publication number, and publication date. U.S. applications must be identified by the inventor, the eight digit application number (the two digit series code and the six digit serial number), and the filing date...

The list of information complying with the identification requirements of 37 CFR 1.98(b) may not be incorporated into the specification of the application in which it is being supplied, but must be submitted in a separate paper....Use of either form PTO-1449, Information Disclosure Citation, or PTO/SB/08A and 08B, Information Disclosure Statement, to list the documents is encouraged. See subsection C(2) below.

#### A (2) Legible Copies

In addition to the list of information, each information disclosure statement must also include a legible copy of:...

(C) For each cited pending U.S. application, the application specification including the claims, and any drawings of the application, or that portion of the application which caused it to be listed including any claims directed to that portion

Therefore, from the review of the November 30<sup>th</sup> IDS above, it is clearly evident that the submission of the '662, '485 and '369 related applications was in complete compliance with § 1.97 and § 1.98 and, therefore, the '662, '485 and '369

related applications must be considered by the Examiner during the examination of the instant application.

With regard to the Examiner's stated reasons for not considering the '662, '485 and '369 related applications of the November 30<sup>th</sup> IDS, neither § 1.97, § 1.98 or MPEP Chapter 609 set forth any requirement that, in order to have related patent applications be considered by the Examiner, the Applicants must provide an:

- a. "indication that there are allowed pertinent claims to this invention" or
- b. "...absent indication that there are allowed claims pertinent to this invention. No copy of indentified [sic] pending allowed claims has been provided, 37 C.F.R. 1.98. SN 09/432,662 will be considered if patent issues" or
- c. "...no copy of pending claims for pending applications SN 09/432,662 has been provided. 37 C.F.R. 1.98"

Further, the Examiner has steadfastly refused to provide any elaboration or legal precedence to support the alleged requirements for filing consideration of the related applications in an IDS. Finally, it is noted that the Examiner has stated, in the Office Action of September 3, 2002 (see paragraph bridging pages 3-4) that **"there appears nothing to consider in SN 09/432,662 material to the patentability of any existing claim in this application."** Such a statement is an admission that the Examiner has in fact considered the '662 application. Accordingly, the Examiner should have indicated such consideration on a References Cited (PTO-892) form to accompany the September 3, 2002 Office Action.

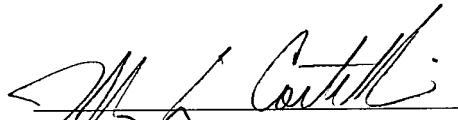
In view of the arguments and evidence provided, the Petitioners respectfully request that the instant petition be granted and that the Examiner be instructed to consider the '662, '485 and '369 related applications filed with in the IDS of November 30, 2001. It is also requested that the Examiner be instructed to provide an indication of such consideration of the '662, '485 and '369 related applications by providing a completed References Cited (PTO-1449) form attached hereto along with a (Supplemental) Notice of Allowability (PTO-37) form as soon as possible.

This petition is submitted under 37 C.F.R. 1.182 since SPE Thomas has effectively denied a petition under 37 C.F.R. 1.181 during his discussion with Mr.

Massie on April 28, 2003. However, should the Commissioner regard the filing of the instant petition under § 1.182 as inappropriate, then it is respectfully requested that the Commissioner accept this petition as having been made under 37 C.F.R. 1.181 (no fee). A check for the petition fee, under 37 C.F.R. 1.17(h), is enclosed, however, should the check become lost or misplaced the Commissioner is hereby authorized to charge the required fee (\$130.00), under 37 C.F.R. 1.17(h), to Deposit Account No. 19-2380 (740756-2160).

Prompt attention to this matter is appreciated.

Respectfully submitted,



Jeffrey L. Costellia  
Registration No. 35,483

NIXON PEABODY LLP  
Suite 900  
401 9<sup>th</sup> Street, N.W.  
Washington D.C. 20004  
(202) 585-8000  
(202) 585-8080 fax

**Attachments:**

Copy of PTO-1449 listing U.S. Application Nos. 09/432,662, 09/580,485, 09/587,369  
Copy of IDS of November 30, 2001  
Copy of Office Action of January 29, 2002  
Copy of RCE/Preliminary Amendment of July 29, 2002  
Copy of RCE/Preliminary Amendment of May 2, 2003  
Copy of allowed claims in Application S.N. 09/580,485  
Copy of allowed claims in Application S.N. 09/432,662

Form PTO-1449  
(Rev. 8-83)

U.S. Department of Commerce  
Patent and Trademark Office

Atty Docket 0756-2160

Serial No. 09/578,895

# INFORMATION DISCLOSURE STATEMENT

Applicants: Shunpei YAMAZAKI et al.

Filing Date: May 26, 2000

Group Art Unit: 2775

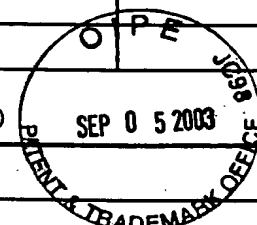
## U.S. PATENT DOCUMENTS

Examiner Initial	Document Number	Date	Name	Class	Subclass	Filing Date (if appropriate)

## OTHER DOCUMENT

(Including Author, Title, Date, Pertinent Pages, Etc.)

Examiner Initial	
	Specification & Drawings of US Patent Application No. 09/432,662
	Specification & Drawings of US Patent Application No. 09/580,485
	Specification & Drawings of US Patent Application No. 09/587,369



RECEIVED

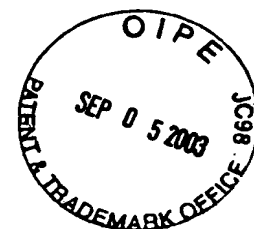
SEP 10 2003

OFFICE OF PETITION

Examiner \_\_\_\_\_ Date Considered \_\_\_\_\_

\*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

11/30/2001



This will acknowledge receipt of the following:

1. Information Disclosure Statement and Notification of Related Application w/ Certificate of Mailing
2. Form PTO-1449 (with 5 references)

in re PATENT application of:

Shunpei YAMAZAKI et al.

Serial No. 09/578,895

Filed: May 26, 2000

Title: ELECTRO-OPTICAL DEVICE AND ELECTRONIC DEVICE

Due date: 10/30/2001

Docket No. 740756-2160  
JLC/mlc



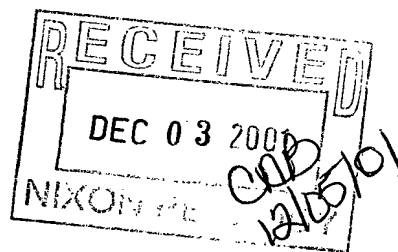
RECEIVED

SEP 10 2003

OFFICE OF PETITIONS

*Nov. 30*, 2001  
Letter: 10/26/2001

*Hand-Carry*



*Pam*

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re PATENT application of: )  
 Shunpei YAMAZAKI et al. ) Art Unit: 2811  
 Serial No. 09/578,895 ) Examiner: G. Munson  
 Filed: May 26, 2000 )  
 For: ELECTRO-OPTICAL DEVICE )  
 AND ELECTRONIC DEVICE ) Hand Carry November 30, 2001



**INFORMATION DISCLOSURE STATEMENT**  
**AND NOTIFICATION OF RELATED APPLICATION**

Commissioner for Patents and Trademarks  
 Washington, D.C. 20231

**RECEIVED**  
 SEP 10 2003  
 OFFICE OF PETITIONS

Sir:

In accordance with the provisions of 37 C.F.R. 1.56 and 37 C.F.R. 1.97-1.99, it is requested that the reference(s) listed on the attached Form PTO-1449 be made of record in the above-identified application.

U.S. Patent Nos. 5,729,308 and 6,236,064 may disclose the use of a multi-gate TFT and an electroluminescence device. The subject invention can be distinguished from these references because they do not disclose a connection of two thin film transistors claimed in the present invention. Copies of the references are submitted herewith in accordance with 37 C.F.R. 1.98(a).

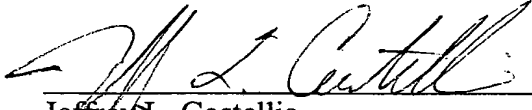
Further, pursuant to Applicant's duty of candor under 37 C.F.R. §1.56, Applicants wish to inform the Examiner of the following applications claiming related subject matter and hereby submit copies of the following applications for the Examiner's consideration:

<u>SERIAL NO.</u>	<u>FILING DATE</u>	<u>INVENTORS</u>
09/432,662	November 3, 1999	Yamazaki et al.
09/580,485	May 30, 2000	Yamazaki et al.
09/587,369	June 2, 2000	Yamazaki et al.



The Commissioner is hereby authorized to charge fees under 37 C.F.R. §§1.16, 1.17, 1.20(a), 1.20(b), 1.20(c), and 1.20(d) (except the Issue Fee) which may be required now or hereafter, or credit any overpayment to Deposit Account No. 19-2380 (740756-2160).

Respectfully submitted,

  
\_\_\_\_\_  
Jeffrey L. Costellia  
Registration No. 35,483

NIXON PEABODY LLP  
8180 Greensboro Drive, Suite 800  
McLean, Virginia 22102  
(703) 790-9110

Form PTO-1449  
(Rev. 8-83)U.S. Department of Commerce  
Patent and Trademark Office

Atty Docket 0756-2160

Serial No. 09/578,895

## INFORMATION DISCLOSURE STATEMENT

Applicants: Shunpei YAMAZAKI et al.

Filing Date: May 26, 2000

Group Art Unit: 2775

## U.S. PATENT DOCUMENTS

Examiner Initial	Document Number	Date	Name	Class	Subclass	Filing Date (if appropriate)
	5,729,308	03/17/1998	Yamazaki et al.			
	6,236,064	05/22/2001	Mase et al.			

## OTHER DOCUMENT

(Including Author, Title, Date, Pertinent Pages, Etc.)

Examiner Initial	
	Specification & Drawings of US Patent Application No. 09/432,662
	Specification & Drawings of US Patent Application No. 09/580,485
	Specification & Drawings of US Patent Application No. 09/587,369

SEP 05 2003  
RECEIVED  
SEP 10 2003  
OFFICE OF PETITIONS

Examiner

Date Considered

\*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

11/30/2001



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/578,895	05/26/2000	Shunpei Yamazaki	0756-2160	8423

22204 7590 01/29/2002

NIXON PEABODY, LLP  
8180 GREENSBORO DRIVE  
SUITE 800  
MCLEAN, VA 22102



EXAMINER

MUNSON, GENE M

ART UNIT PAPER NUMBER

2811

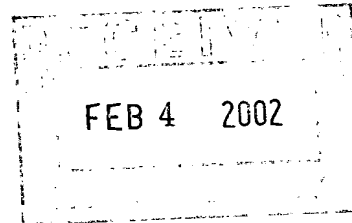
DATE MAILED: 01/29/2002

RECEIVED

SEP 10 2003

OFFICE OF PETITIONS

Please find below and/or attached an Office communication concerning this application or proceeding.



DOCKETED  
02/04/02 By 003  
Nixon Peabody, LLP

# Office Action Summary

Application No. <u>578,895</u>	Applicant(s) <u>S. YAMAZAKI ET AL</u>	
Examiner <u>G. MUNSON</u>	Group Art Unit <u>2811</u>	SEP 05 2003 OFFICE OF PETITIONS

— The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address —

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE THREE MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

☒ Responsive to communication(s) filed on 21 NOVEMBER 2001

☒ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- ☒ Claim(s) 1-10, 14-51 is/are pending in the application.
- Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- ☒ Claim(s) 3, 4, 7, 10, 29-31, 33-36, 38, 39, 41, 42, 44-47, 49, 50 is/are allowed.
- ☒ Claim(s) 1, 2, 5, 6, 14-18, 20, 23-28, 32, 37, 40, 43, 48, 51 is/are rejected.
- ☒ Claim(s) 8, 9, 19, 21, 22 is/are objected to.
- ☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement

## Application Papers

- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).
- ☐ All ☐ Some\* ☐ None of the:
- ☐ Certified copies of the priority documents have been received.
- ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_
- ☐ Copies of the certified copies of the priority documents have been received

in this national stage application from the International Bureau (PCT Rule 17.2(a))

\*Certified copies not received: \_\_\_\_\_

## Attachment(s)

- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s) 5 ☐ Interview Summary, PTO-413
- ☐ Notice of Reference(s) Cited, PTO-892 ☐ Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948 ☐ Other: \_\_\_\_\_

Office Action Summary

Art Unit: 2811

Claims 14-16, 24, 28, 32, 37, 40, 43, 48 and 51 are rejected under 35 U.S.C. 112, second and fourth paragraphs. It is unclear how the claims further limit the electroluminescence display device of claims 1-3, 17, 25, 29, 33, 38, 41, 44 and 49. This rejection could be overcome if each of the claims were put in independent form including the limitations of the claims on which they depend.

Claims 14-16, 24, 28, 32, 37, 40, 43, 48 and 51 are rejected under 35 U.S.C. 112, first paragraph. The listed "electronic" devices are not clearly described to enable a person skilled in the art to make and use the devices. Figures 16 and 20 may be sufficient for a design patent but not for a utility patent.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2811

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 2, 5, 6, 17, 18, 20, 23 and 25-27 are rejected under 35 U.S.C. 102 as unpatentable as shown by Tang et al '365 *of record*. The "channel" and "impurity" regions read on inherent subportions of a channel in TFT1 of Tang et al (Figure 2).

Claims 1, 2, 5, 6, 17, 18, 20, 23 and 25-27 are rejected under 35 U.S.C. 102 as unpatentable as shown by Hosokawa Japanese document 10-189252 *of record*. The "channel" and "impurity" regions read on inherent subportions of a channel in transistor 21 of Hosokawa (Figures 2, 3).

Claims 14-16, 24 and 28 are rejected under 35 U.S.C. 103 as unpatentable over Tang et al '365 and Hosokawa Japan document 10-189252, considered together. It would have been obvious to use pixels as in Tang et al (Figure 2) and Hosokawa (Figures 2, 3) in order to achieve flat panel displays for known electronic devices as claimed.

The arguments in the response, filed 21 November 2001, have been considered but are not wholly persuasive. Contrary to the response (pages 14-15), the rejected claims are not limited to a "multi-gate structure".

Art Unit: 2811

Claims 3, 4, 7, 10, 29-31, 33-36, 38, 39, 41, 42, 44-47, 47, 49 and 50 are allowed. Moreover, claims 8, 9, 19, 21 and 22 are objected to as dependent upon rejected claims but would be allowable if claims 8, 9, 19 and 21 were each put in completed form as independent claims including all limitations of claims 1, 8; 2, 9; 17, 19; 17, 21.

This action is **FINAL**.

This action is a **final rejection** and is intended to close the prosecution of this application. Applicant's reply under 37 CFR 1.113 to this action is limited either to an appeal to the Board of Patent Appeals and Interferences or to an amendment complying with the requirements set forth below.

If applicant should desire to appeal any rejection made by the examiner, a Notice of Appeal must be filed within the period for reply identifying the rejected claim or claims appealed. The Notice of Appeal must be accompanied by the required appeal fee of appropriate amount.

If applicant should desire to file an amendment, entry of a proposed amendment after final rejection cannot be made as a matter of right unless it merely cancels claims or complies with a formal requirement made earlier. Amendments touching the merits of the application which otherwise might not be proper may be admitted upon a showing a good and sufficient reasons why they are necessary and why they were not presented earlier.

A reply under 37 CFR 1.113 to a final rejection must include the appeal from, or cancellation of, each rejected claim. The filing, whichever is longer, of an amendment after final rejection, whether or not it is entered, does not stop the running of the statutory period for reply to the final

Art Unit: 2811

rejection unless the examiner holds the claims to be in condition for allowance. Accordingly, if a Notice of Appeal has not been filed properly within the period for reply, or any extension of this period obtained under either 37 CFR 1.136(a) or (b), the application will become abandoned.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication should be directed to G. Munson at telephone number (703) 308-4925 or 0956.

Munson/nt

1-23-02

**GENE M. MUNSON  
EXAMINER  
GROUP ART UNIT 2811**



#5

Form PTO-1449  
(Rev. 8-83)U.S. Department of Commerce  
Patent and Trademark Office

Atty Docket 0756-2160

Serial No. 09/578,895

## INFORMATION DISCLOSURE STATEMENT

Applicants: Shunpei YAMAZAKI et al.

Filing Date: May 26, 2000

Group Art Unit: 2775 <sup>2871</sup>

## U.S. PATENT DOCUMENTS

Examiner Initial	Document Number	Date	Name	Class	Subclass	Filing Date (if appropriate)
<i>gkh</i>	5,729,308	03/17/1998	Yamazaki et al.	—	—	
<i>gkh</i>	6,236,064	05/22/2001	Mase et al.	—	—	

## OTHER DOCUMENT

(Including Author, Title, Date, Pertinent Pages, Etc.)

SEP 05 2003

Examiner Initial	
	<del>Specification &amp; Drawings of US Patent Application No. 09/432,662</del>
	<del>Specification &amp; Drawings of US Patent Application No. 09/580,485</del>
	<del>Specification &amp; Drawings of US Patent Application No. 09/587,369</del>

*No copies nor indication that there are allowed pertinent claims to this invention.*

RECEIVED  
DEC - 3 2001  
TC 2800 MAIL ROOM

Examiner *G. MUNSON*Date Considered *18 JANUARY 2002*

\*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



Receipt is acknowledged on: July 29, 2002

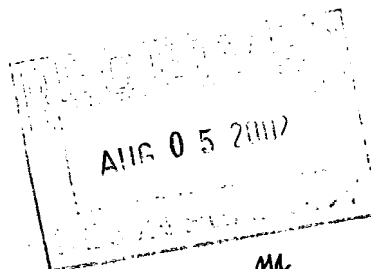
In re the **Request for Continued Examination (RCE)** of: Shunpei YAMAZAKI et al.  
Serial No. 09/578,895 Filed: May 26, 2000  
For: ELECTRO-OPTICAL DEVICE AND ELECTRONIC DEVICE

Petition for Extension of Time (duplicate)  
Request for Continued Examination (RCE) Transmittal and Fee Transmittal (duplicate)  
Preliminary Amendment  
Check No. 5288 in the amount of \$1,550.00  
(\$740 RCE Fee, \$810 Extension Fee)

DRS/JLC/rmg  
(740756-2160)

Due Date: 07/29/2002

HANDCARRY



PK  
8/7/02

Receipt is acknowledged on: July 29, 2002

In re the **Request for Continued Examination (RCE)** of: Shunpei YAMAZAKI et al.  
Serial No. 09/578,895 Filed: May 26, 2000  
For: ELECTRO-OPTICAL DEVICE AND ELECTRONIC DEVICE



Petition for Extension of Time (duplicate)  
Request for Continued Examination (RCE) Transmittal and Fee Transmittal (duplicate)  
Preliminary Amendment  
Check No. 5288 in the amount of \$1,550.00  
(\$740 RCE Fee, \$810 Extension Fee)

DRS/JLC/rmg  
(740756-2160)

**HANDCARRY**

Due Date: 07/29/2002

THIS DOCUMENT HAS VISIBLE AND INVISIBLE FLUORESCENT FIBERS. VIEW UNDER BLACK LIGHT. TRUE WATERMARK IN PAPER. HOLD TO LIGHT TO VIEW.

JIXON PEABODY LLP  
ATTORNEYS AT LAW

PATENT DISBURSEMENT ACCOUNT  
8180 Greensboro Drive  
Suite 800  
McLean, VA 22102

7/29/02

CHASE MANHATTAN BANK, N.A.  
ROCHESTER, NY

5288

50-17  
223

PAY THE SUM 1550 DOLLARS AND 00 CENTS\*\*\*\*\*

\$ 1550.00\*

PAY EXACTLY

TO THE ORDER OF COMMISSIONER FOR PATENTS AND TRADEMARKS

Vendor # 740101  
Request # 439425

740756-2160

*London Rutter* MP

DOCUMENT CONTAINS VOID, PANTOGRAPH AND MICRO-PRINT SIGNATURE LINE. MAGNIFY TO VIEW.

005288 022300173512060452

**PETITION FOR EXTENSION OF TIME UNDER 37 CFR 1.136(a)**

Docket Number: 740756-2160

In re Application of: Shunpei YAMAZAKI et al.

Application Number: 09/578,895

Filed: May 26, 2000

For: ELECTRO-OPTICAL DEVICE AND ELECTRONIC DEVICE

Group Art Unit: 2811

Examiner: G. Munson

This is a request under the provisions of 37 CFR 1.136(a) to extend the period for filing a reply in the above identified application.

The requested extension and appropriate non-small-entity fee are as follows (check time period desired):

☐ One month (37 CFR 1.17(a)(1)) - (\$55/\$110)

☒ Second and Third Months (37 CFR 1.17(a)(2))

First month previously paid May 29, 2002

☐ Three month (37 CFR 1.17(a)(3)) - (\$460/\$920)

☐ Four month (37 CFR 1.17(a)(4)) - (\$720/\$1440)

☐ Five month (37 CFR 1.17(a)(5)) - (\$980/\$1960)

\$

\$810.00

\$

\$

\$

☐ Applicant claims small entity status. See 37 CFR 1.27. Therefore, the fee amount shown above is reduced by one-half, and the resulting fee is \$

☒ A check in the amount of the fee is enclosed.

☐ Payment by credit card. Form PTO-2038 is attached.

☐ The Commissioner has already been authorized to charge fees in this application to a Deposit Account.

☒ The Commissioner is hereby authorized to charge any fees which may be required, or credit any overpayment, to Deposit Account Number 19-2380.  
I have enclosed a duplicate copy of this sheet.

I am the ☐ applicant/inventor

☐ assignee of record of the entire interest. See 37 CFR 3.71.

Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96).

☒ attorney or agent of record.

☐ attorney or agent under 37 CFR 1.34(a).

Registration number if acting under 37 CFR 1.34(a) \_\_\_\_\_

**WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.**

July 29, 2002

Date

Donald R. Studebaker

Signature

Donald R. Studebaker

Typed or printed name

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.

☐ Total of \_\_\_\_\_ forms are submitted.

Burden Hour Statement: This form is estimated to take 0.1 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231. NVA234744.1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE



In re Patent Application of )  
Shunpei YAMAZAKI et al. )  
Serial No. 09/578,895 ) Art Unit: 2811  
Filed: May 26, 2000 ) Examiner: G. Munson  
For: ELECTRO-OPTICAL DEVICE )  
AND ELECTRONIC DEVICE ) Date: July 29, 2002

PRELIMINARY AMENDMENT

Honorable Commissioner for Patents and Trademarks  
Washington, D.C. 20231

Sir:

Please preliminarily amend the subject application as follows:

IN THE CLAIMS:

Please amend claims 1, 2, 17 and 25 as follows: Please note that the claims are presented below in their amended form. They are further presented as an Attachment to the Amendment whereby the amendments to the claims are outlined using the conventional method of bracketing and underlining.

1. (Twice Amended) An electroluminescence display device comprising:  
a substrate;  
a plurality of pixels over the substrate, each of the plurality of pixels comprising:  
a first thin film transistor;  
a second thin film transistor comprising a gate electrode electrically connected to the first thin film transistor; and

an electroluminescence element electrically connected to the second thin film transistor,

wherein the first thin film transistor comprises at least two channel regions in an active layer, at least two gate electrodes corresponding to the channel regions, over the active layer with a gate insulating film interposed therebetween, and an impurity region interposed between the channel regions.

2. (Twice Amended) An electroluminescence display device comprising:  
a substrate; and

a plurality of pixels over the substrate, each of the plurality of pixels comprising:

a first thin film transistor;

a second thin film transistor comprising a gate electrode electrically connected to the first thin film transistor; and

an electroluminescence element electrically connected to the second thin film transistor,

wherein the first thin film transistor comprises at least two channel regions in an active layer, at least two gate electrodes corresponding to the channel regions, over the active layer with a gate insulating film interposed therebetween, and an impurity region interposed between the channel regions, and

wherein a channel width of the second thin film transistor is greater than a channel width of the first thin film transistor.

17. (Amended) An electroluminescence display device comprising:

a substrate; and

a plurality of pixels over the substrate, each of the plurality of pixels comprising:

a first thin film transistor;

a second thin film transistor comprising a gate electrode electrically connected to the first thin film transistor; and

an electroluminescence element electrically connected to the second thin film transistor,

wherein the first thin film transistor comprises at least two gate electrodes over the substrate, at least two channel regions corresponding to the gate electrode, over the gate electrode with a gate insulating film interposed therebetween, and an impurity region interposed between the channel regions.

25. (Amended) An electroluminescence display device comprising:

a substrate; and

a plurality of pixels over the substrate, each of the plurality of pixels comprising:

a first thin film transistor;

a second thin film transistor comprising a gate electrode electrically connected to the first thin film transistor; and

an electroluminescence element electrically connected to the second thin film transistor,

wherein the first thin film transistor comprises at least two gate electrodes over the substrate, at least two channel regions corresponding to the gate electrode, over the gate electrode with a gate insulating film interposed therebetween, and an impurity region interposed between the channel regions, and

wherein a channel width of the second thin film transistor is greater than a channel width of the first thin film transistor.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

This will acknowledge receipt of the following:

1. REQUEST FOR CONTINUED EXAMINATION (RCE)
2. PETITION FOR EXTENSION OF TIME (ONE MONTH)
3. PRELIMINARY AMENDMENT
4. CHECK No. 7730, \$860.00 (\$750-RCE; \$110-EXT)

In re Patent Application of:

Inventors: Shunpei YAMAZAKI et al.

Serial No.: 09/578,895

Filed: May 26, 2000

Title: ELECTRO-OPTICAL DEVICE AND ELECTRONIC DEVICE

Due Date: April 27, 2003

Docket No. 740756-2160

DRS/LCD/dam

Date: 4/28/2003



RECEIVED

SEP 10 2003

OFFICE OF PETITIONS

~~PLEASE DATE~~  
PLEASE DATE STAMP AND RETURN

NVA263124.1

THIS DOCUMENT HAS VISIBLE AND INVISIBLE FLUORESCENT FIBERS - VIEW UNDER BLACK LIGHT - TRUE WATERMARK IN PAPER - HOLD TO LIGHT TO VIEW

4/28/2003

7730

XON PEABODY LLP  
ATTORNEYS AT LAW

PATENT DISBURSEMENT ACCOUNT  
8180 Greensboro Drive  
Suite 800  
McLean, VA 22102

CHASE MANHATTAN BANK, N.A.  
ROCHESTER, NY

PAY THE SUM 860 DOLLARS AND 00 CENTS\*\*\*\*\*

50-17  
223  
860.00\*

PAY EXACTLY

TO THE ORDER OF COMMISSIONER FOR PATENTS AND TRADEMARKS

*Deborah J. Somme*

Vendor #: 740101  
Request #: 482344 740756-2160

DOCUMENT CONTAINS VOID PANTOGRAPH AND MICRO-PRINT SIGNATURE LINE - MAGNIFY TO VIEW

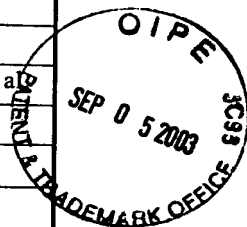
007730 022300 1731512060452



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**REQUEST  
FOR  
CONTINUED EXAMINATION (RCE)  
TRANSMITTAL**Subsection (b) of 35 U.S.C. § 132, effective on May 29, 2000,  
provides for continued examination of an utility or plant application  
filed on or after June 8, 1995.  
See The American Inventors Protection Act of 1999 (AIPA).

Application Number	09/578,895
Filing Date	May 26, 2000
First Named Inventor	Shunpei YAMAZAKI et al
Group Art Unit	2811
Examiner Name	Gene M. Munson
Attorney Docket Number	740756-2160



This is a Request for Continued Examination (RCE) under 37 C.F.R. § 1.114 of the above-identified application.

**NOTE:** 37 C.F.R. § 1.114 is effective on May 29, 2000. If the above-identified application was filed prior to May 29, 2000, applicant may wish to consider filing a continued prosecution application (CPA) under 37 C.F.R. § 1.53(d) (PTO/SB/29) instead of a RCE to be eligible for the patent term adjustment provisions of the AIPA. See Changes to Application Examination and Provisional Application Practice, Final Rule, 65 Fed. Reg. 50092 (Aug. 16, 2000); Interim Rule, 65 Fed. Reg. 14865 (Mar. 20, 2000), 1233 Off. Gaz. Pat. Office 47 (Apr. 11, 2000), which established RCE practice.**RECEIVED**

SEP 10 2003

OFFICE OF PETITIONS

1. **Submission required under 37 C.F.R. § 1.114**

- a. ☐ Previously submitted
- i. ☐ Consider the amendment(s)/reply under 37 C.F.R. § 1.116 previously filed on \_\_\_\_\_  
(Any unentered amendment(s) referred to above will be entered).
- ii. ☐ Consider the arguments in the Appeal Brief or Reply Brief previously filed on \_\_\_\_\_
- iii. ☐ Other \_\_\_\_\_
- b. ☒ Enclosed
- i. ☐ Amendment/Reply
- ii. ☐ Affidavit(s)/Declaration(s)
- iii. ☐ Information Disclosure Statement (IDS)
- iv. ☒ Other PRELIMINARY AMENDMENT

2. **Miscellaneous**

- a. ☐ Suspension of action on the above-identified application is requested under 37 C.F.R. § 1.103(c) for a period of \_\_\_\_\_ months. (Period of suspension shall not exceed 3 months; Fee under 37 C.F.R. § 1.17(l) required)
- b. ☐ Other \_\_\_\_\_

3. **Fees** The RCE fee under 37 C.F.R. § 1.17(e) is required by 37 C.F.R. § 1.114 when the RCE is filed.

- a. ☒ The Director is hereby authorized to charge the following fees, or credit any overpayments, to Deposit Account No. 19-2380
- i. ☒ RCE fee required under 37 C.F.R. § 1.17(e)
- ii. ☒ Extension of time fee (37 C.F.R. §§ 1.136 and 1.17)
- iii. ☐ Other \_\_\_\_\_
- b. ☒ Check in the amount of \$860.00 enclosed
- c. ☐ Payment by credit card (Form PTO-2038 enclosed)

**SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED**

Name (Print/Type)	Luan C. Do	Registration No. (Attorney/Agent)	38,434
Signature		Date	April 28, 2003

**CERTIFICATE OF MAILING OR TRANSMISSION**

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner For Patents, Box RCE, Washington, DC 20231, or facsimile transmitted to the U.S. Patent and Trademark Office on:

Name (Print/Type)	Deborah Movahhedi
Signature	
Date	April 28, 2003

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS: SEND Fees and Completed Forms to the following address: Commissioner for Patents, Box RCE, Washington, DC 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

# REQUEST FOR CONTINUED EXAMINATION (RCE) TRANSMITTAL

Subsection (b) of 35 U.S.C. § 132, effective on May 29, 2000, provides for continued examination of an utility or plant application filed on or after June 8, 1995.

See The American Inventors Protection Act of 1999 (AIPA).

Application Number	09/578,895
Filing Date	May 26, 2000
First Named Inventor	Shunpei YAMAZAKI et al.
Group Art Unit	2811
Examiner Name	G. Munson
Attorney Docket Number	740756-2160

This is a Request for Continued Examination (RCE) under 37 C.F.R. § 1.114 of the above-identified application.

**NOTE:** 37 C.F.R. § 1.114 is effective on May 29, 2000. If the above-identified application was filed prior to May 29, 2000, applicant may wish to consider filing a continued prosecution application (CPA) under 37 C.F.R. § 1.53(d) (PTO/SB/29) instead of a RCE to be eligible for the patent term adjustment provisions of the AIPA. See Changes to Application Examination and Provisional Application Practice, Final Rule, 65 Fed. Reg. 50092 (Aug. 16, 2000); Interim Rule, 65 Fed. Reg. 14865 (Mar. 20, 2000), 1233 Off. Gaz. Pat. Office 47 (Apr. 11, 2000), which established RCE practice.

## 1. Submission required under 37 C.F.R. § 1.114

### a. ☒ Previously submitted

- i. ☒ Consider the amendment(s)/reply under 37 C.F.R. § 1.116 previously filed on May 29, 2002  
(Any unentered amendment(s) referred to above will be entered).
- ii. ☐ Consider the arguments in the Appeal Brief or Reply Brief previously filed on \_\_\_\_\_
- iii. ☐ Other \_\_\_\_\_

### b. ☒ Enclosed

- i. ☒ Preliminary Amendment
- ii. ☐ Affidavit(s)/Declaration(s)
- iii. ☐ Information Disclosure Statement (IDS)
- iv. ☒ Petition for Extension of Time

## 2. Miscellaneous

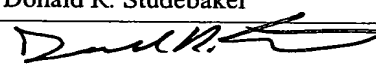
- a. ☐ Suspension of action on the above-identified application is requested under 37 C.F.R. § 1.103(c) for a period of \_\_\_\_\_ months. (Period of suspension shall not exceed 3 months; Fee under 37 C.F.R. § 1.17(I) required)
- b. ☐ Other \_\_\_\_\_

## 3. Fees

The RCE fee under 37 C.F.R. § 1.17(e) is required by 37 C.F.R. § 1.114 when the RCE is filed.

- a. ☒ The Director is hereby authorized to charge the following fees, or credit any overpayments, to Deposit Account No.19-2380.
  - i. ☒ RCE fee required under 37 C.F.R. § 1.17(e)
  - ii. ☒ Extension of time fee (37 C.F.R. §§ 1.136 and 1.17)
  - iii. ☐ Other \_\_\_\_\_
- b. ☒ Check in the amount of \$1,550.00 enclosed
- c. ☐ Payment by credit card (Form PTO-2038 enclosed)

## SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED

Name (Print/Type)	Donald R. Studebaker	Registration No. (Attorney/Agent)	32,815
Signature		Date	July 29, 2002

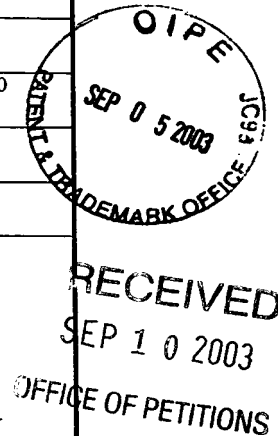
## CERTIFICATE OF MAILING OR TRANSMISSION

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner For Patents, Box RCE, Washington, DC 20231, or facsimile transmitted to the U.S. Patent and Trademark Office on:

Name (Print/Type)	
Signature	Date

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS: SEND Fees and Completed Forms to the following address: Commissioner for Patents, Box RCE, Washington, DC 20231.

PETITION FOR EXTENSION OF TIME UNDER 37 CFR 1.136(a)		Docket Number (Optional) 740756-2160
<b>CERTIFICATE OF MAILING</b> I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to Commissioner for Patents, Washington, DC 20231, on <u>7-28-03</u> . <u>Deborah Movahhedi</u> Name: <u>DEBORAH MOVAHHEDI</u>	In re Application of Shunpei YAMAZAKI et al.	
	Application Number 09/578,895	Filed May 26, 2000
	For ELECTRO-OPTICAL DEVICE AND ELECTRONIC DEVICE	
	Group Art Unit 2811	Examiner Gene M. Munson
This is a request under the provisions of 37 CFR 1.136(a) to extend the period for filing a reply in the above identified application. The requested extension and appropriate non-small-entity fee are as follows (check time period desired):		
<input checked="" type="checkbox"/> One month (37 CFR 1.17(a)(1)) - (\$55/\$110)		\$110.00
<input type="checkbox"/> Two months (37 CFR 1.17(a)(2)) - (\$205/\$410)		\$
<input type="checkbox"/> Three months (37 CFR 1.17(a)(3)) - (\$465/\$930)		\$
<input type="checkbox"/> Four months (37 CFR 1.17(a)(4)) - (\$725/\$1450)		\$
<input type="checkbox"/> Five months (37 CFR 1.17(a)(5)) - (\$985/\$1970)		\$
<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. Therefore, the fee amount shown above is reduced by one-half, and the resulting fee is \$ _____.		
<input checked="" type="checkbox"/> A check in the amount of the fee is enclosed.		
<input type="checkbox"/> Payment by credit card. Form PTO-2038 is attached.		
<input type="checkbox"/> The Commissioner has already been authorized to charge fees in this application to a Deposit Account.		
<input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge any fees which may be required, or credit any overpayment, to Deposit Account Number <u>19-2380</u> . I have enclosed a duplicate copy of this sheet.		
I am the <input type="checkbox"/> applicant/inventor		
<input type="checkbox"/> assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96).		
<input checked="" type="checkbox"/> attorney or agent of record.		
<input type="checkbox"/> attorney or agent under 37 CFR 1.34(a). Registration number if acting under 37 CFR 1.34(a) _____.		
<b>WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.</b>		
<u>April 28, 2003</u> Date		<u>[Signature]</u> Signature <u>Luan C. De Reg. No. 38,434</u> Typed or printed name
NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.		
<input type="checkbox"/> Total of _____ forms are submitted.		



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

Shunpei YAMAZAKI et al.

Serial No. 09/578,895

Filed: May 26, 2000

For: ELECTRO-OPTICAL DEVICE AND  
ELECTRONIC DEVICE

)

) Group Art Unit: 2811

) Examiner: Gene M. Munson

)

) Date: April 28, 2003



RECEIVED

SEP 10 2003

CERTIFICATE OF MAILING

OFFICE OF PETITIONS

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as First Class Mail in an envelope addressed to: Commissioner for Patents, Washington, D.C. 20231, on April 28, 2003.

Deborah Movahhedi  
Deborah Movahhedi

**PRELIMINARY AMENDMENT**

Commissioner for Patents  
Washington, D.C. 20231

Sir:

In response to the final Office Action mailed December 27, 2002, please consider the following Request for Continued Examination (RCE), amendments and remarks in connection with the above-identified application.

IN THE SPECIFICATION:

**Page 56, first full paragraph, please replace with the following:**

In embodiment 11, examples of the pixel structure of the EL display device of the present invention are shown in Figs. 21A and 21B. Note that in embodiment 11, reference numeral 4701 denotes a source wiring of a switching TFT 4702, reference numeral 4703 denotes a gate wiring of the switching TFT 4702, reference numeral 4704 denotes a current control TFT, 4705 denotes an electric current supply line, 4706 denotes a power source control TFT, 4707 denotes a power source control gate wiring, and 4708 denotes an EL element. Japanese Patent Application ~~Laid-open~~ No. Hei 11-341272 may be referred to regarding the operation of the power source control TFT 4706.

IN THE CLAIMS:

Please cancel claims 14-16, 24, 28, 32, 37, 40, 43, 48, 51 and 54 without prejudice or disclaimer of the subject matter recited therein.

**REMARKS**

The Examiner's final Office Action of December 27, 2002 has been received and its contents reviewed. Applicants' would like to thank the Examiner for the consideration given to the above-identified application, and for indicating the allowance of claims 2-4, 6, 7, 9, 10, 25-27, 29-31, 38, 39, 41, 42, 49, 50, 52 and 53. Further, the Examiner is thanked for indicating in the telephonic conference on April 28, 2003 that the review of this Preliminary Amendment will be sufficiently delayed until copies of a small number of references to be submitted in an IDS are available and submitted, as per Applicants' request.

By the above actions, claims 14-16, 24, 28, 32, 37, 40, 43, 48, 51 and 54 have been cancelled. Accordingly, claims 1-10, and 17-23, 25-27, 29-31, 33-36, 38-39, 41, 42, 44-47, 49-50, and 52-53 are pending for consideration, of which claims 1-3, 17, 25, 29, 33, 38, 41, 44, 49 and 52 are independent. In view of these actions and the following remarks, reconsideration of this application is now requested.

Before turning to the detailed Office Action, Applicants again would like to request the Examiner to consider the related application Serial No. 09/432,662 submitted in the IDS of November 30, 2001 for the reason as follows:

The Examiner has indicated in the Advisory Action mailed July 16, 2002, for example, that no copy of identified pending allowed claims has been provided in accordance with 37 C.F.R. 1.98, and that SN 09/432,662 will be considered if a patent issues. It is unclear why the Examiner believes that there is any requirement that patent applications disclosed to the U.S. Patent and Trademark Office under applicants' duty of disclosure set forth in 37 C.F.R. 1.56 which are filed in compliance with 37 C.F.R. 1.98 require an indication that there are allowed claims pertinent to this invention set forth in the related applications.

Further, as previously submitted, while such allowed claims may be relevant to the issue of double patenting, there is no such requirement for the Examiner to indicate consideration of the subject matter set forth in the related applications. Accordingly, in that the U.S. Patent and Trademark Office has placed this burden on the applicant, it is only fitting that the Examiner indicate his consideration of the related applications submitted in accordance therewith. Such

applications include U.S. Application Serial Nos. 09/432,662; 09/580,485 and 09/587,369 as identified in applicants' Form PTO-1449 filed November 30, 2001.

Should the Examiner maintain his position in this regard, he is again hereby requested to provide support for such position by pointing out the specific text of 37 C.F.R. 1.98 requiring an indication that there are allowed claims pertinent to this invention set forth in the related applications.

Referring now to the detailed Office Action, claims 14-16, 24, 28, 32, 37, 40, 43, 48, 51 and 54 are rejected under 35 U.S.C. §112, first, second and fourth paragraphs. In response, and in order to expedite the prosecution of this application, Applicants have canceled claims 14-16, 24, 28, 32, 37, 40, 43, 48, 51 and 54 as shown above, without prejudice to file a divisional application directed thereto. Accordingly, Applicants respectfully request reconsideration and withdrawal of the §112, first, second and fourth paragraphs, rejections.

Claims 1, 5, 17, 20, 23, 33, 36, 44 and 47 stand rejected under 35 U.S.C. §102(b) as unpatentable over Yamada. Further, claims 14, 24, 37 and 48 stand rejected 35 U.S.C. §103(a) as unpatentable over Yamada and Tang et al. (U.S. Patent No. 5,684,365 of record – hereafter Tang), and claims 8, 18, 19, 21, 22, 34, 35, 45 and 45 stand objected to as dependent upon rejected claims but would be allowable if these claims are rewritten as independent claims including all limitations of a base claim and any intervening claims.


In response to the rejections, Applicants have submitted on December 31, 2002 a verified English translation of priority document Japanese Patent Application Serial No. 11-158787, which was filed on June 4, 1999 prior to effective U.S. filing date of the Yamada reference, which is November 30, 1999. Therefore, Applicants have perfected the claimed priority date, and the Yamada reference does not qualify as prior art.

In view of the amendments and arguments set forth above, Applicants respectfully request reconsideration and withdrawal of the pending §102(b) over Yamada and the pending §103(a) rejection over Yamada in view of Tang, as well as the objection to claims 8, 18, 19, 21, 22, 34, 35, 45 and 45.



While the present application is now believed to be in condition for allowance, should the Examiner find some issue to remain unresolved, or should any new issues arise which could be eliminated through discussion with Applicants' representative, then the Examiner is invited to contact the undersigned by telephone in order that the further prosecution of this application can thereby be expedited.

Respectfully submitted,



---

Luan C. Do  
Registration No. 38,434

NIXON PEABODY LLP  
8180 Greensboro Drive, Suite 800  
McLean, VA 22102  
(703) 770-9300

CLAIMS AS ALLOWED

1. A method for manufacturing an electrical device, said method comprising:
  - forming at least a thin film transistor on an insulating surface;
  - forming a first insulating film comprising an organic resin over the thin film transistor;
  - forming a second insulating film comprising silicon nitride on the first insulating film;
  - forming a pixel electrode on the second insulating film, said pixel electrode electrically connected to the thin film transistor;
  - forming an EL layer over the pixel electrode;
  - forming a second electrode over the EL layer,
  - wherein the EL layer is selectively formed through an ink jet method.
  
2. A method for manufacturing an electrical device, said method comprising:
  - forming at least a thin film transistor;
  - forming a first insulating film comprising an organic resin over the thin film transistor;
  - forming a second insulating film comprising at least one selected from the group consisting of aluminum oxide, aluminum nitride and nitrated aluminum oxide on the first insulating film;
  - forming a pixel electrode over the second insulating film, said pixel electrode electrically connected to the thin film transistor;
  - forming an EL layer over the pixel electrode;
  - forming a second electrode over the EL layer,
  - wherein the EL layer is selectively formed through an ink jet method.
  
3. A method for manufacturing an electrical device, said method comprising:
  - forming at least a thin film transistor on an insulating surface;

forming a first insulating film comprising an organic resin over the thin film transistor;

forming a second insulating film comprising diamond like carbon on the first insulating film;

forming a pixel electrode over the second insulating film, said pixel electrode electrically connected to the thin film transistor;

forming a EL layer over the pixel electrode;

forming a second electrode over the EL layer;

wherein the EL layer is selectively formed through an ink jet method.

4. A method for manufacturing an electrical device, said method comprising:

forming at least a thin film transistor on an insulating surface;

forming a first insulating film comprising silicon nitride over the thin film transistor;

forming a second insulating film comprising an organic resin on the first insulating film;

forming a third insulating film comprising silicon nitride on the second insulating film, wherein the third insulating film comprises the same material as the first insulating film;

forming a pixel electrode over the third insulating film, said pixel electrode electrically connected to the thin film transistor;

forming an EL layer over the pixel electrode;

forming a second electrode over the EL layer,

wherein the EL layer is selectively formed through an ink jet method.

5. A method for manufacturing an electrical device comprising:

forming at least a thin film transistor on an insulating surface;

forming a first insulating film comprising at least one selected from the group consisting of aluminum oxide, aluminum nitride and nitrated aluminum oxide over the thin film transistor;

forming a second insulating film comprising an organic resin on the first insulating film;

forming a third insulating film comprising at least the one selected from the group consisting of aluminum oxide, aluminum nitride and nitrated aluminum oxide on the second insulating film, wherein the third insulating film comprises the same material as the first insulating film;

forming a pixel electrode over the third insulating film, said pixel electrode electrically connected to the thin film transistor;

forming an EL layer over the pixel electrode;

forming a second electrode over the EL layer,

wherein the EL layer is selectively formed through an ink jet method.

8. A method according to claim 1, wherein the EL layer is an organic material.
9. A method according to claim 1, wherein the ink jet method uses a piezo element.
13. A method according to claim 2, wherein the EL layer is an organic material.
14. A method according to claim 2, wherein the ink jet method uses a piezo element.
15. A method according to claim 3, wherein the EL layer is an organic material.
16. A method according to claim 3, wherein the ink jet method uses a piezo element.
17. A method according to claim 4, wherein the EL layer is an organic material.
18. A method according to claim 4, wherein the ink jet method uses a piezo element.
19. A method according to claim 5, wherein the EL layer is an organic material.
20. A method according to claim 5, wherein the ink jet method uses a piezo element.
30. A method according to claim 1, wherein one of the pixel electrode and the second electrode comprises at least one selected from the group consisting of magnesium (Mg), lithium (Li), cesium (Cs), barium (Ba), potassium (K), beryllium (Be), or calcium (Ca).

31. A method according to claim 1, wherein the second insulating film comprises at least one selected from the group consisting of silicon nitride oxide and silicon nitride.

33. A method according to claim 2, wherein one of the pixel electrode and the second electrode comprises at least one selected from the group consisting of magnesium (Mg), lithium (Li), cesium (Cs), barium (Ba), potassium (K), beryllium (Be), or calcium (Ca).

34. A method according to claim 2, wherein the insulating film comprising aluminum nitride.

36. A method according to claim 3, wherein one of the pixel electrode and the second electrode comprises at least one selected from the group consisting of magnesium (Mg), lithium (Li), cesium (Cs), barium (Ba), potassium (K), beryllium (Be), or calcium (Ca).

37. A method according to claim 4, wherein one of the pixel electrode and the second electrode comprises at least one selected from the group consisting of magnesium (Mg), lithium (Li), cesium (Cs), barium (Ba), potassium (K), beryllium (Be), or calcium (Ca).

38. A method according to claim 4, wherein the EL layer is formed in a dry nitrogen atmosphere.

39. A method according to claim 5, wherein one of the pixel electrode and the second electrode comprises at least one selected from the group consisting of magnesium (Mg), lithium (Li), cesium (Cs), barium (Ba), potassium (K), beryllium (Be), or calcium (Ca).

40. A method according to claim 5, wherein the EL layer is formed in a dry argon atmosphere.

41. A method according to claim 1, further comprising:  
forming a contact hole in the first and second insulating films,  
wherein an upper diameter of the contact hole is longer length than a lower diameter of the contact hole.

42. A method according to claim 1, further comprising:  
forming a contact hole in the first and second insulating films;  
forming the pixel electrode on the second insulating film,  
wherein the second insulating film is not in contact with side surfaces of the contact hole while the pixel electrode is in contact with the side surface of the contact hole and edges of the first and second insulating films.

43. A method according to claim 2, further comprising:  
forming a contact hole in the first and second insulating films,  
wherein an upper diameter of the contact hole is longer length than a lower diameter of the contact hole.

44. A method according to claim 2, further comprising:  
forming a contact hole in the first and second insulating films;  
forming the pixel electrode on the second insulating film,  
wherein the second insulating film is not in contact with side surfaces of the contact hole while the pixel electrode is in contact with the side surface of the contact hole and edges of the first and second insulating films.

45. A method according to claim 3, further comprising:  
forming a contact hole in the first and second insulating films,  
wherein an upper diameter of the contact hole is longer length than a lower diameter of the contact hole.

46. A method according to claim 3, further comprising:  
forming a contact hole in the first and second insulating films;  
forming the pixel electrode on the second insulating film,  
wherein the second insulating film is not in contact with side surfaces of the contact hole while the pixel electrode is in contact with the side surface of the contact hole and edges of the first and second insulating films.

47. A method according to claim 4,  
wherein the third insulating film comprises at least one selected from the group consisting of silicon nitride oxide and silicon nitride.

48. A method according to claim 4, further comprising:  
forming a contact hole in the first, second and third insulating films,  
wherein an upper diameter of the contact hole is longer length than a lower diameter  
of the contact hole.

49. A method according to claim 4, further comprising:  
forming a contact hole in the first, second and third insulating films;  
forming the pixel electrode on the third insulating film,  
wherein the third insulating film is not in contact with side surfaces of the contact  
hole while the pixel electrode is in contact with the side surface of the contact hole and edges  
of the first, second and third insulating films.

50. A method according to claim 5, further comprising:  
forming a contact hole in the first, second and third insulating films,  
wherein an upper diameter of the contact hole is longer length than a lower diameter  
of the contact hole.

51. A method according to claim 5, further comprising:  
forming a contact hole in the first, second and third insulating films;  
forming the pixel electrode on the third insulating film,  
wherein the third insulating film is not in contact with side surfaces of the contact  
hole while the pixel electrode is in contact with the side surface of the contact hole and edges  
of the first, second and third insulating films.

52. A method for manufacturing an electrical device comprising:  
forming at least a thin film transistor on an insulating surface;  
forming a first insulating film comprising diamond like carbon over the thin film  
transistor;  
forming a second insulating film comprising an organic resin on the first insulating  
film;  
forming a third insulating film comprising diamond like carbon on the second  
insulating film, wherein the third insulating film comprises the same material as the first  
insulating film;

forming a pixel electrode over the third insulating film, said pixel electrode electrically connected to the thin film transistor;

forming an EL layer over the pixel electrode;

forming a second electrode over the EL layer,

wherein the EL layer is selectively formed through an ink jet method.

53. A method according to claim 52, wherein the EL layer is an organic material.

54. A method according to claim 52, wherein the ink jet method uses a piezo element.

55. A method according to claim 52, wherein one of the pixel electrode and the second electrode comprises at least one selected from the group consisting of magnesium (Mg), lithium (Li), cesium (Cs), barium (Ba), potassium (K), beryllium (Be), or calcium (Ca).

56. A method according to claim 52, further comprising:  
forming a contact hole in the first, second and third insulating films,  
wherein an upper diameter of the contact hole is longer length than a lower diameter of the contact hole.

57. A method according to claim 52, further comprising:  
forming a contact hole in the first, second and third insulating films;  
forming the pixel electrode on the third insulating film,  
wherein the third insulating film is not in contact with side surfaces of the contact hole while the pixel electrode is in contact with the side surface of the contact hole and edges of the first, second and third insulating films.

58. A method for manufacturing an electrical device, said method comprising:  
forming at least a thin film transistor on an insulating surface;  
forming a first insulating film over the thin film transistor;  
forming a second insulating film on the first insulating film;  
forming a third insulating film on the second insulating film;  
forming a fourth insulating film on the third insulating film;  
forming a contact hole in the second, third and fourth insulating films;



forming a pixel electrode over the fourth insulating film, said pixel electrode electrically connected to the thin film transistor through the contact hole;  
forming a bank on the fourth insulating film;  
forming an EL layer over the pixel electrode;  
forming a second electrode over the EL layer;  
forming a protection electrode over the second electrode;  
forming a fifth insulating film over the protection electrode;  
wherein the EL layer is selectively formed through an ink jet method,  
wherein the third insulating film comprises an organic material,  
wherein the EL layer is formed in a dry nitrogen atmosphere.

59. A method according to claim 58, wherein the EL layer is an organic material.
60. A method according to claim 58, wherein the ink jet method uses a piezo element.
61. A method according to claim 58,  
wherein one of the pixel electrode and the second electrode comprises at least one selected from the group consisting of magnesium (Mg), lithium (Li), cesium (Cs), barium (Ba), potassium (K), beryllium (Be), or calcium (Ca).
62. A method according to claim 58, wherein an upper diameter of the contact hole is longer length than a lower diameter of the contact hole.
63. A method according to claim 58, wherein the fourth insulating film is not in contact with side surfaces of the contact hole while the pixel electrode is in contact with the side surface of the contact hole and edges of the second, third and fourth insulating films.
64. A method according to claim 58, wherein each of second, fourth and fifth insulating films comprises a same material.
65. A method for manufacturing an electrical device, said method comprising:  
forming at least a thin film transistor on an insulating surface;  
forming a first insulating film over the thin film transistor;

forming a second insulating film on the first insulating film;  
forming a third insulating film on the second insulating film;  
forming a fourth insulating film on the third insulating film;  
forming a contact hole in the second, third and fourth insulating films;  
forming a pixel electrode over the fourth insulating film, said pixel electrode electrically connected to the thin film transistor through the contact hole;  
forming a bank on the fourth insulating film;  
forming an EL layer over the pixel electrode;  
forming a second electrode over the EL layer;  
forming a protection electrode over the second electrode;  
forming a fifth insulating film over the protection electrode;  
wherein the EL layer is selectively formed through an ink jet method,  
wherein the third insulating film comprises an organic material,  
wherein the EL layer is formed in a dry argon atmosphere.

66. A method according to claim 65, wherein the EL layer is an organic material.

67. A method according to claim 65, wherein the ink jet method uses a piezo element.

68. A method according to claim 65, wherein one of the pixel electrode and the second electrode comprises at least one selected from the group consisting of magnesium (Mg), lithium (Li), cesium (Cs), barium (Ba), potassium (K), beryllium (Be), or calcium (Ca).

69. A method according to claim 65, wherein an upper diameter of the contact hole is longer length than a lower diameter of the contact hole.

70. A method according to claim 65, wherein the fourth insulating film is not in contact with side surfaces of the contact hole while the pixel electrode is in contact with the side surface of the contact hole and edges of the second, third and fourth insulating films.

71. A method according to claim 65, wherein each of second, fourth and fifth insulating films comprises a same material.

USSN 09/432,662

Our Ref. SEL 141

Your Ref. US 4020/4031

CLAIMS AS ALLOWED

59. An electroluminescence display device comprising:
- a pixel portion and a peripheral driving circuit portion formed over a substrate;
  - at least a first thin film transistor for controlling current and a second thin film transistor for switching each being formed in the pixel portion;
  - at least a CMOS transistor formed in the peripheral driving circuit portion;
  - wherein the first thin film transistor includes:
    - a gate electrode having a first conductive layer being in contact with a gate insulating film, and a second conductive layer being in contact with top and side surfaces of the first conductive layer and the gate insulating film;
    - a semiconductor layer comprising a first channel formation region, a first impurity region being in contact with the first channel formation region, and a second impurity region being in contact with the first impurity region;
    - a pixel electrode being electrically connected to the second impurity region of the first thin film transistor; and
    - a light emitting layer being formed over the pixel electrode,
  - wherein the first impurity region is disposed so as to completely overlaps with the second conductive layer with the gate insulating film interposed therebetween;
  - an electrode being formed over the light emitting layer.
60. An electroluminescence display device according to claim 59 wherein the light emitting layer is an EL layer.
61. An electroluminescence display device according to claim 59 wherein at least one of the pixel electrode and the electrode is transparent.
62. An electroluminescence display device according to claims 59 wherein a concentration of an impurity element for giving n-type in the first impurity region ranges from  $1 \times 10^{16}$  atoms/cm<sup>3</sup> to  $5 \times 10^{19}$  atoms/cm<sup>3</sup>.
63. An electroluminescence display device according to claims 59 wherein the first

conductive layer of the first thin film transistor comprises one or more kinds of elements selected from a group consisting of titanium (Ti), tantalum (Ta), tungsten (W), and molybdenum (Mo), or comprises a material containing those elements as ingredients.

64. An electroluminescence display device according to claims 59 wherein the first conductive layer of the first thin film transistor comprises a single layer or a plurality of layers.

65. An electroluminescence display device according to claims 59 wherein the first conductive layer of the first thin film transistor comprises at least:

a conductive layer (A) formed to come in contact with the gate insulating film, and comprising one or more kinds of elements selected from a group consisting of titanium (Ti), tantalum (Ta), tungsten (W), and molybdenum (Mo), or comprising a material containing those elements as ingredients; and

a conductive layer (B) formed on the conductive layer (A), and comprising one or more kinds of elements selected from aluminum (Al) and copper (Cu), or comprising a material containing those elements as ingredients.

66. An electroluminescence display device according to claims 59 wherein the second conductive layer comprises one or more kinds of elements selected from a group consisting of titanium (Ti), tantalum (Ta), tungsten (W), and molybdenum (Mo), or comprises a material containing those elements as ingredients.

67. An electroluminescence display device according to claims 59 wherein the electroluminescence display device is incorporated into an electronic equipment selected from the group consisting of a personal computer, a video camera, a portable information terminal, a digital camera, a digital versatile disk player, a goggle type display, an electronic game machine, and a projector.

68. An electroluminescence display device comprising:

a pixel portion and a peripheral driving circuit portion formed over a substrate;  
at least a first thin film transistor for controlling current and a second thin film transistor for switching each being formed in the pixel portion;  
at least a CMOS transistor formed in the peripheral driving circuit portion;  
wherein the first thin film transistor includes:

a gate electrode having a first conductive layer being in contact with a gate insulating film, and a second conductive layer being in contact with top and side surfaces of the first conductive layer and the gate insulating film;

a semiconductor layer comprising a first channel formation region, a first impurity region being in contact with the first channel formation region, and a second impurity region being in contact with the first impurity region;

a pixel electrode being electrically connected to the second impurity region of the first thin film transistor; and

a light emitting layer being formed over the pixel electrode,

wherein the first impurity region is disposed so as to partially overlaps with the second conductive layer with the gate insulating film interposed therebetween,

an electrode being formed over the light emitting layer.

69 . An electroluminescence display device according to claim 68 wherein the light emitting layer is an EL layer.

70 . An electroluminescence display device according to claim 68 wherein at least one of the pixel electrode and the electrode is transparent.

71 . An electroluminescence display device according to claims 68 wherein a concentration of an impurity element for giving n-type in the first impurity region ranges from  $1 \times 10^{16}$  atoms/cm<sup>3</sup> to  $5 \times 10^{19}$  atoms/cm<sup>3</sup>.

72 . An electroluminescence display device according to claims 68 wherein the first conductive layer of the first thin film transistor comprises one or more kinds of elements selected from a group consisting of titanium (Ti), tantalum (Ta), tungsten (W), and molybdenum (Mo), or comprises a material containing those elements as ingredients.

73 . An electroluminescence display device according to claims 68 wherein the first conductive layer of the first thin film transistor comprises a single layer or a plurality of layers.

74 . An electroluminescence display device according to claims 68 wherein the first conductive layer of the first thin film transistor comprises at least:

a conductive layer (A) formed to come in contact with the gate insulating film, and comprising one or more kinds of elements selected from a group consisting of titanium (Ti),

tantalum (Ta), tungsten (W), and molybdenum (Mo), or comprising a material containing those elements as ingredients; and

a conductive layer (B) formed on the conductive layer (A), and comprising one or more kinds of elements selected from aluminum (Al) and copper (Cu), or comprising a material containing those elements as ingredients.

75 . An electroluminescence display device according to claims 68 wherein the second conductive layer comprises one or more kinds of elements selected from a group consisting of titanium (Ti), tantalum (Ta), tungsten (W), and molybdenum (Mo), or comprises a material containing those elements as ingredients.

76 . An electroluminescence display device according to claims 68 wherein the electroluminescence display device is incorporated into an electronic equipment selected from the group consisting of a personal computer, a video camera, a portable information terminal, a digital camera, a digital versatile disk player, a goggle type display, an electronic game machine, and a projector.

77 . An electroluminescence display device comprising:

a pixel portion and a peripheral driving circuit portion formed over a substrate;  
at least a first thin film transistor for controlling current and a second thin film transistor for switching each being formed in the pixel portion;

at least a CMOS transistor formed in the peripheral driving circuit portion;  
wherein each of the first thin film transistor and the second thin film transistor includes:

a gate electrode having a first conductive layer being in contact with a gate insulating film, and a second conductive layer being in contact with top and side surfaces of the first conductive layer and the gate insulating film;

a semiconductor layer comprising a first channel formation region, a first impurity region being in contact with the first channel formation region, and a second impurity region being in contact with the first impurity region,

wherein the first impurity region is disposed so as to completely overlaps with the second conductive layer with the gate insulating film interposed therebetween in at least one of the first thin film transistor and the second thin film transistor;

wherein a pixel electrode is electrically connected to the second impurity region of the first thin film transistor,

wherein a light emitting layer is formed over the pixel electrode,  
wherein an electrode is formed over the light emitting layer.

78 . An electroluminescence display device according to claim 77 wherein the light emitting layer is an EL layer.

79 . An electroluminescence display device according to claim 77 wherein at least one of the pixel electrode and the electrode is transparent.

80 . An electroluminescence display device according to claims 77 wherein a concentration of an impurity element for giving n-type in the first impurity region ranges from  $1 \times 10^{16}$  atoms/cm<sup>3</sup> to  $5 \times 10^{19}$  atoms/cm<sup>3</sup>.

81 . An electroluminescence display device according to claims 77 wherein the first conductive layer of the first thin film transistor comprises one or more kinds of elements selected from a group consisting of titanium (Ti), tantalum (Ta), tungsten (W), and molybdenum (Mo), or comprises a material containing those elements as ingredients.

82 . An electroluminescence display device according to claims 77 wherein the first conductive layer of the first thin film transistor comprises a single layer or a plurality of layers.

83 . An electroluminescence display device according to claims 77 wherein the first conductive layer of the first thin film transistor comprises at least:

a conductive layer (A) formed to come in contact with the gate insulating film, and comprising one or more kinds of elements selected from a group consisting of titanium (Ti), tantalum (Ta), tungsten (W), and molybdenum (Mo), or comprising a material containing those elements as ingredients; and

a conductive layer (B) formed on the conductive layer (A), and comprising one or more kinds of elements selected from aluminum (Al) and copper (Cu), or comprising a material containing those elements as ingredients.

84 . An electroluminescence display device according to claims 77 wherein the second conductive layer comprises one or more kinds of elements selected from a group consisting of titanium (Ti), tantalum (Ta), tungsten (W), and molybdenum (Mo), or comprises a material containing those elements as ingredients.

85 . An electroluminescence display device according to claims 77 wherein the electroluminescence display device is incorporated into an electronic equipment selected from the group consisting of a personal computer, a video camera, a portable information terminal, a digital camera, a digital versatile disk player, a goggle type display, an electronic game machine, and a projector.

86 . An electroluminescence display device comprising:  
a pixel portion and a peripheral driving circuit portion formed over a substrate;  
at least a first thin film transistor for controlling current and a second thin film transistor for switching each being formed in the pixel portion;  
at least a CMOS transistor formed in the peripheral driving circuit portion;  
wherein each of the first thin film transistor and the second thin film transistor includes:  
a gate electrode having a first conductive layer being in contact with a gate insulating film, and a second conductive layer being in contact with top and side surfaces of the first conductive layer and the gate insulating film;  
a semiconductor layer comprising a first channel formation region, a first impurity region being in contact with the first channel formation region, and a second impurity region being in contact with the first impurity region,  
wherein the first impurity region is disposed so as to completely overlaps with the second conductive layer with the gate insulating film interposed therebetween in at least one of the first thin film transistor and the second thin film transistor;  
wherein a pixel electrode is electrically connected to the second impurity region of the first thin film transistor,  
wherein a light emitting layer is formed over the pixel electrode,  
wherein an electrode is formed over the light emitting layer.

87 . An electroluminescence display device according to claim 86 wherein the light emitting layer is an EL layer.

88 . An electroluminescence display device according to claim 86 wherein at least one of the pixel electrode and the electrode is transparent.

89 . An electroluminescence display device according to claims 86 wherein a concentration of an impurity element for giving n-type in the first impurity region ranges from



$1 \times 10^{16}$  atoms/cm<sup>3</sup> to  $5 \times 10^{19}$  atoms/cm<sup>3</sup>.

90 . An electroluminescence display device according to claims 86 wherein the first conductive layer of the first thin film transistor comprises one or more kinds of elements selected from a group consisting of titanium (Ti), tantalum (Ta), tungsten (W), and molybdenum (Mo), or comprises a material containing those elements as ingredients.

91 . An electroluminescence display device according to claims 86 wherein the first conductive layer of the first thin film transistor comprises a single layer or a plurality of layers.

92 . An electroluminescence display device according to claims 86 wherein the first conductive layer of the first thin film transistor comprises at least:

a conductive layer (A) formed to come in contact with the gate insulating film, and comprising one or more kinds of elements selected from a group consisting of titanium (Ti), tantalum (Ta), tungsten (W), and molybdenum (Mo), or comprising a material containing those elements as ingredients; and

a conductive layer (B) formed on the conductive layer (A), and comprising one or more kinds of elements selected from aluminum (Al) and copper (Cu), or comprising a material containing those elements as ingredients.

93 . An electroluminescence display device according to claims 86 wherein the second conductive layer comprises one or more kinds of elements selected from a group consisting of titanium (Ti), tantalum (Ta), tungsten (W), and molybdenum (Mo), or comprises a material containing those elements as ingredients.

94 . An electroluminescence display device according to claims 86 wherein the electroluminescence display device is incorporated into an electronic equipment selected from the group consisting of a personal computer, a video camera, a portable information terminal, a digital camera, a digital versatile disk player, a goggle type display, an electronic game machine, and a projector.

95 . An electroluminescence display device comprising:

a pixel portion and a peripheral driving circuit portion formed over a substrate;

at least a first thin film transistor for controlling current and a second thin film transistor for switching each being formed in the pixel portion;

at least a CMOS transistor formed in the peripheral driving circuit portion;

wherein the first thin film transistor includes:

a gate electrode having a first conductive layer being in contact with a gate insulating film, and a second conductive layer being in contact with top and side surfaces of the first conductive layer and the gate insulating film;

a semiconductor layer comprising a first channel formation region, a first impurity region being in contact with the first channel formation region, and a second impurity region being in contact with the first impurity region;

a pixel electrode being electrically connected to the second impurity region of the first thin film transistor; and

wherein the first impurity region is disposed so as to completely overlaps with the second conductive layer with the gate insulating film interposed therebetween;

wherein a light emitting layer is formed over the pixel electrode,

wherein an electrode is formed over the light emitting layer,

wherein the first thin film transistor has a p-type conductivity.

96 . An electroluminescence display device according to claim 95 wherein the light emitting layer is an EL layer.

97 . An electroluminescence display device according to claim 95 wherein at least one of the pixel electrode and the electrode is transparent.

98 . An electroluminescence display device according to claims 95 wherein the first conductive layer of the first thin film transistor comprises one or more kinds of elements selected from a group consisting of titanium (Ti), tantalum (Ta), tungsten (W), and molybdenum (Mo), or comprises a material containing those elements as ingredients.

99 . An electroluminescence display device according to claims 95 wherein the first conductive layer of the first thin film transistor comprises a single layer or a plurality of layers.

100 . An electroluminescence display device according to claims 95 wherein the first conductive layer of the first thin film transistor comprises at least:

a conductive layer (A) formed to come in contact with the gate insulating film, and

comprising one or more kinds of elements selected from a group consisting of titanium (Ti), tantalum (Ta), tungsten (W), and molybdenum (Mo), or comprising a material containing those elements as ingredients; and

a conductive layer (B) formed on the conductive layer (A), and comprising one or more kinds of elements selected from aluminum (Al) and copper (Cu), or comprising a material containing those elements as ingredients.

101 . An electroluminescence display device according to claims 95 wherein the second conductive layer comprises one or more kinds of elements selected from a group consisting of titanium (Ti), tantalum (Ta), tungsten (W), and molybdenum (Mo), or comprises a material containing those elements as ingredients.

102 . An electroluminescence display device according to claims 95 wherein the electroluminescence display device is incorporated into an electronic equipment selected from the group consisting of a personal computer, a video camera, a portable information terminal, a digital camera, a digital versatile disk player, a goggle type display, an electronic game machine, and a projector.